

CLAIMS

I Claim:

1. A blow molding device adapted for stabilizing a container formed from a preform, the preform and the container each having a portion defining a finish, said device comprising:

    a mold including a first mold section, a second mold section and a cavity therebetween;

    a mandrel adjacent to said mold, said mandrel having one of the preforms and the container disposed thereon, said first mold section and said second mold section being adapted to open and close about said mandrel in order to permit said mandrel to translate into and out of said cavity in said mold; and

    at least one jaw member adjacent to one of said first mold section and of said second mold section, said jaw member conforming to the finish and moving transversely of the finish, said jaw member being biased by a resilient member to compress the finish between said jaw member and said mandrel to stabilize the container when said first mold section and said second mold section separate.

2. The blow molding device of Claim 1 wherein said at least one jaw member is retracted away from said finish when said first and second mold sections traverse to a fully open condition to allow translation of said mandrel with one of the preform and the container attached thereto.

3. The blow molding device of Claim 1 wherein said resilient member is disposed around a guide bar.

4. The blow molding device of Claim 1 wherein said jaw member is slidingly attached to one of said first mold section and said second mold section by a guide bar.

5. The blow molding device of Claim 1 wherein said resilient member is a spring member.

6. The blow molding device of Claim 1 wherein said jaw member is a pair of opposing jaws.

7. The blow molding device of Claim 2 wherein said at least one biasing member is compressed by said jaw member coming into contact with the finish of the preform when said first and said second mold sections are translated toward each other.

8. The blow molding device of Claim 4 wherein said jaw member has a resilient member, said resilient member disposed between said jaw member and one of said first mold section and said second mold section.

9. The blow molding device of Claim 4 wherein said resilient member is disposed on a guide bar, said resilient member being compressed after said jaw member contacts the finish and the first mold section translates toward said second mold section.

10. The blow molding device of Claim 9 wherein said resilient member is a helical spring.

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11. A method of stabilizing a container in a blow mold, the container being formed from a plastic preform including a finish, the blow mold including a first mold section, a second mold section, and a cavity therebetween, and a core assembly, the core assembly having a mandrel, the mandrel extending into one of the preform and the container, said method comprising:

attaching a jaw member to one of the first mold section and the second mold section, said jaw member having a section conforming to the finish of the preform;

moving the mandrel with the preform into the cavity when the first mold section and the second mold section are in an open position;

moving the first mold section and the second mold section to an initial closed position whereby said jaw member moves transversely toward the finish;

translating the first mold section and the second mold section to a final closed position whereby said jaw member contacts the finish;

moving said jaw member transversely into a recess in one of said first mold section and said second mold section, said jaw member being biased toward the finish by a biasing member, said biasing member being compressed when said jaw member moves transversely into said recess;

opening said blow mold after forming the container, said jaw member biasing the finish between said jaw member and the mandrel to restrain the container in the cavity during an initial opening position of the mold; and

removing the container on the mandrel from the cavity after said jaw member is translated away from the finish and the mold is in an open position.

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12. The method of Claim 11 wherein the finish of the container has an A band.

13. The method of Claim 11 wherein said jaw member is slidingly coupled to one of said first mold section and said second mold section by a guide bar.

14. The method of Claim 11 wherein said resilient member is a spring.

15. The method of Claim 11 wherein said jaw member has a guide bar, said resilient member disposed on said guide bar between said jaw member and one of said first mold section and said second mold section.

16. The method of Claim 11 wherein said jaw member has a helical spring member and a guide bar, said helical spring member disposed around said guide bar.

17. The method of Claim 11 wherein said jaw member has a pair of guide bars and a pair of helical springs, each of said helical springs disposed on each of said pair of guide bars.

18. The method of Claim 11 wherein said jaw member has a portion conforming to the outer perimeter of the finish.

19. The method of Claim 11 wherein said jaw member is a pair of opposing jaw members.

20. The method of Claim 11 wherein the mandrel has a projection, said projection having an outer diameter, said outer diameter being smaller than an inner diameter of the finish.

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